

Borough and Port  
of Sandwich.

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*Annual Report*

OF THE

Medical Officer of Health

FOR THE YEAR

1938

J. J. DAY,

O.B.E., M.R.C.S., L.R.C.P., D.P.H.



Castlemead,  
Manwood Road,  
Sandwich.

April, 1939.

**To the Mayor and Corporation of the Borough of  
Sandwich.**

Mr. Mayor, Ladies and Gentlemen,

I submit herewith my Report on the Health and General Sanitary Condition of your Borough for the year ended December 31st, 1938.

The Report is compiled in accordance with the requirements of Circular 1728 (England), issued by the Ministry of Health under date 25th October, 1938. It is my tenth Annual Report to you.

A summary of the Report of the Sanitary Inspector, Mr. Kendall, on the work he has carried out during the year is included.

Both he and the Borough Surveyor, Mr. Smart, have, as usual, assisted me greatly by their co-operation during the year and I once again convey to them my gratitude for this assistance.

I am,

Your obedient servant,

J. J. DAY,  
Medical Officer of Health.

# **NATURAL AND SOCIAL CONDITIONS OF THE BOROUGH.**

As from April 1st, 1935, there was added to the Borough, South of the River Stour, from the Eastry Rural District, part of Woodnesborough and Worth C.P's. amounting to 631 acres, with a Population at the Census, 1931, of 334, and North of the River Stour, from the Isle of Thanet Rural District, the C.P. of Stonar and part of the C.P. of Minster amounting to 798 acres with a Population at the Census, 1931, of 66.

The total acreage of the Borough so constituted is 2,137 and the Population 3,687.

Area as Constituted April 1st, 1935	Constitution of Area in terms of Areas as at April 26th, 1931	Acreage (Land & In-land Water)	Population	
			1921	1931
Sandwich M.B.	Sandwich M.B.(Whole)	708	3161	3287
	Parts of Woodnesborough & Worth C.P.s & Eastry R.D.	631	302	334
	Stonar C.P. & Part of Minster C.P., I. of Thanet R.D. ...	798	40	66
		2137	3503	3687

Sandwich M.B. now forms one Civil Parish.

The mid-year Population, 1938, is estimated by the Registrar General to be 3,913.

## **SOCIAL CONDITIONS AND CHIEF INDUSTRIES.**

Sandwich is a market town surrounded by an agricultural area and adjacent to important Colliery developments. There are no large industrial undertakings in the town but the many small businesses which exist appear to be prosperous and there is but little unemployment.

## **PHYSICAL FEATURES AND GENERAL CHARACTER OF THE BOROUGH.**

The Borough is enclosed by the Eastry Rural District as now constituted.

## **GEOLOGICAL PARTICULARS.**

Immediately underlying the surface formations is a continuous thick bed of chalk imposed on a thinner bed of gault clay under which is a bed of lower greensands of varying thickness. This overlies a layer of wealden formation imposed on a massive wedge of jurassic rocks. It is possible that the jurassic rocks may not actually extend below the Borough area. The next lower formation is a bowl-shaped block of the coal measures (transitional and middle); the Borough area is situated over the thinning north-eastern edge of this deposit. The coal measures rest on carboniferous limestone.

The surface formation is mainly alluvium of varying thickness, clayey in nature with patches of sand and shingle.

The major portion of the area is low-lying, but, in the Southern portion the land is slightly more elevated. The whole of the Northern part is low-lying marsh-land on which during the War the so-called Port of Richborough was constructed.

## **HOUSING CONDITIONS, YEAR ENDED**

**31st DECEMBER, 1938.**

### **General Statistics.**

Area (acres), 2,137.

Population (Census, 1931, 3,687), estimated 1938 3,913.

Number of inhabited houses (end of 1938) according to Rate Books, 1,166.

Rateable value, £26,127 : 0 : 0.

Sum represented by a penny rate, £103 : 18 : 2.27.

### **1.—Unfit Dwelling-houses.**

Inspection:

(1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts), 120. Number of inspections made for the purpose, 215.

(2) Number of dwelling-houses which were inspected and recorded under the Housing Consolidated Regulations, 1925 and 1932, 78. Number of inspections made for the purpose, 108.

(3) Number of dwelling-houses found to be in a state so dangerous, or injurious to health, as to be unfit for human habitation, 1.

(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation, 46.

## **2.—Remedy of defects without Service of formal Notices.**

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers, 45.

## **3.—Action under Statutory Powers.**

(a) Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936:—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs, 1.

(2) Number of dwelling-houses which were rendered fit after service of formal notices: (a) by owners, 1, (b) by local authority in default of owners, nil.

(b) Proceedings under Public Health Acts:—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied, 3.

(2) Number of dwelling-houses in which defects were remedied after service of formal notices:—

(a) By owners, 3.

(b) By Local Authority in default of owners, nil.

(c) Proceedings under Sections 11 and 13 of the Housing Act, 1936:—

(1) Number of dwelling-houses in respect of which Demolition Orders were made, nil.

(2) Number of dwelling-houses demolished in pursuance of Demolition Orders, nil.

(d) Proceedings under Section 12 of the Housing Act, 1936:—

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made, nil.

Total number of houses owned by the Local Authority, 112.

Number of new houses built during 1938:—

(a) By the Local Authority, 6.

(b) By other bodies or persons, 25.

(e) Proceedings under Housing Act, 1936, Overcrowding:

(1) Number of dwellings overcrowded at the end of the year, 2.

(2) Number of families dwelling therein, 2.

(3) Number of persons dwelling therein, 15.

(4) Number of new cases of overcrowding reported during the year, nil.

(5) Number of cases of overcrowding relieved during the year, 2.

(6) Number of persons concerned in such cases, 15.

(7) Particulars of any cases in which dwelling houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding, nil.

There is now no need for further accommodation to be provided, either to replace unsatisfactory property or to provide additional accommodation. In fact, there appears to be a surplus of accommodation available.

## **ACTION TAKEN DURING THE YEAR UNDER PROVISIONS OF THE SHOPS ACT, 1934.**

Ninety-eight visits were made. One informal notice was served in regard to closing hours.

### **Eradication of Bed Bugs.**

No complaints in regard to the infestation of premises or belongings of tenants have been received during the year.

## **VITAL STATISTICS.**

### **Extracts for the Year, 1938.**

#### **Live Births.**

Legitimate : Total 55 (male 25, female 30).

Illegitimate : Total, 4.

#### **Birth Rate.**

15.07 per 1,000 population.

#### **Still Births.**

Total : 2.

#### **Deaths.**

Total : 41.

**Death Rate.**

10.4 per 1,000 population.

**Number of Women Dying in, or in Consequence of, Childbirth.**

From Sepsis, nil. From other causes, nil.

**Death Rate of Infants under One Year of Age, per 1,000 Live Births.**

Legitimate, 38.1. Illegitimate, nil. Total, 33.8.  
Deaths from Cancer (all ages), 10.  
Deaths from Measles (all ages), 1.  
Deaths from Whooping Cough, nil.  
Deaths from Diarrhoea (under 2 years of age), 1.  
Details in regard to these extracts follow.

**VITAL STATISTICS.**

**Births.**

All particulars regarding the births in the Borough during the year are shown in the table below:—

District	Estima- tedPopu- lation	BIRTHS					Birth Rate	Illegiti- mate Births % of Total Births
		Legitimate		Illegitimate		Total		
		Male	F'm'le	Male	F'm'le			
Sandwich M. B.	3913	25	30	2	2	59	15.07	6.7
Birth Rate England and Wales 15.1 per 1000 popn.								

There is a rise both in the number of Births and in the Birth Rate, which is only slightly below that for the country as a whole.

**Deaths.**

The corrected number of deaths among inhabitants of the Borough during the year was 41, 21 males and 20 females, producing a crude death rate of 10.4 per 1,000 population. This is below the rate for 1937, and well below the rate for the country as a whole.

DEATHS				
District	Year	Population Estimated	Total Deaths	Death Rate per 1000 popn.
Sandwich M.B.	1938	3913	41	10.4
Death Rate, England & Wales, 11.6 per 1000 popn.				

An examination of the table showing the causes of death reveals that during the year there were two deaths from Tuberculosis, and that the deaths from respiratory diseases were again low. The deaths from Cancer were 10, and there were 8 deaths from Cerebral Hæmorrhage, Heart Disease, and Arterio-Sclerosis.

I am glad still to be able to report an excess of births over deaths. There was during the year a further small "Natural Increase" in the population of the Borough.

Below is a tabular statement of the ages at which the various deaths occurred.

Eliminating the deaths of infants under one year of age the average age at death was 63.9 years; the average age at death of the males was 63.5 years, and of the females 63.8 years.

Ages.				Male.	Female.
Under 5	...	...	...	1	1
5 to 10	...	...	...	—	1
10 to 15	...	...	...	—	—
15 to 20	...	...	...	—	—
20 to 30	...	...	...	—	—
30 to 40	...	...	...	1	—
40 to 50	...	...	...	3	1
50 to 60	...	...	...	2	2
60 to 70	...	...	...	5	4
70 to 80	...	...	...	3	5
80 to 90	...	...	...	5	3
90 to 100	...	...	...	—	1

Causes of Death in Year 1938.									
Causes of Death								Males.	Females
All Causes	...	...	...	...	...	...	...	21	20
1. Typhoid and Paratyphoid Fevers	...	...	...	...	...	...	...	1	
2. Measles	...	...	...	...	...	...	...		
3. Scarlet Fever	...	...	...	...	...	...	...		
4. Whooping Cough	...	...	...	...	...	...	...		
5. Diphtheria	...	...	...	...	...	...	...		
6. Influenza	...	...	...	...	...	...	...		
7. Encephalitis Lethargica	...	...	...	...	...	...	...		
8. Cerebro-Spinal Fever	...	...	...	...	...	...	...		
9. Tuberculosis of Respiratory System	...	...	...	...	...	...	...		1
10. Other Tuberculous Disease	...	...	...	...	...	...	...		1
11. Syphilis	...	...	...	...	...	...	...		
12. General Paralysis of the Insane	Tabes	Dorsalis	...	...	...	...	...		
13. Cancer, Malignant Disease	...	...	...	...	...	...	...	3	7
14. Diabetes	...	...	...	...	...	...	...		
15. Cerebral Hæmorrhage, Etc.	...	...	...	...	...	...	...		
16. Heart Disease	...	...	...	...	...	...	...	5	3
17. Aneurysm	...	...	...	...	...	...	...		
18. Other Circulatory Diseases	...	...	...	...	...	...	...	2	
19. Bronchitis	...	...	...	...	...	...	...	2	2
20. Pneumonia (All Forms)	...	...	...	...	...	...	...	1	
21. Other Respiratory Diseases	...	...	...	...	...	...	...		
22. Peptic Ulcer	...	...	...	...	...	...	...	1	
23. Diarrhœa, Etc. (under two years)	...	...	...	...	...	...	...	1	
24. Appendicitis	...	...	...	...	...	...	...		1
25. Cirrhosis of Liver	...	...	...	...	...	...	...		
26. Other Diseases of Liver, etc.	...	...	...	...	...	...	...		
27. Other Digestive Diseases	...	...	...	...	...	...	...	2	
28. Acute and Chronic Nephritis	...	...	...	...	...	...	...		
29. Puerperal Sepsis	...	...	...	...	...	...	...		
30. Other Puerperal Causes	...	...	...	...	...	...	...		
31. Congenital Debility, Premature Birth, Malformation, Etc.	...	...	...	...	...	...	...		1
32. Senility	...	...	...	...	...	...	...		4
33. Suicide	...	...	...	...	...	...	...		
34. Other Violence	...	...	...	...	...	...	...	1	
35. Other Defined Diseases	...	...	...	...	...	...	...	2	
36. Causes Ill-defined or Unknown	...	...	...	...	...	...	...		
Special Causes (included in No. 35 above)	...	...	...	...	...	...	...		
Small-pox	...	...	...	...	...	...	...		
Poliomyelitis	...	...	...	...	...	...	...		
Polioencephalitis	...	...	...	...	...	...	...		

Infantile Mortality Rate.

The table following shows the particulars in regard to this rate:—

District	BIRTHS					DEATHS under 1 year					Infantile Mortality rate per 1000 Births
	Legit'te		Ill'g'mte		To- tal	Legiti'te		Ill'g'mte		To- tal	
	M.	F.	M.	F.		M.	F.	M.	F.		
Sandwich M.B.	25	30	2	2	59	1	1	—	—	2	33.8
England and Wales Infantile Mortality Rate, 53 per 1000 Births.											

This rate is satisfactory. The cause of death in the two cases registered was one Prematurity, one Diarrhœa.

INFECTIOUS DISEASES.

Only 9 cases of notifiable diseases occurred during the year. The following table shows the quarterly incidence of these :—

1938 Table showing Quarterly Incidence of Infectious Diseases Notified														
Sandwich M.B.	Scarlet Fever	Diphtheria	Enteric Fever	Pneumonia	Enceph. Letharg.	Dysentery	Ophthalm. Neonatorum	Puerp. Pyrexia	Erysipelas	Total	T.B. Lungs	T.B. Other	Total	Grand Total
1st Quarter	—	—	—	—	—	—	—	—	1	1	1	—	1	2
2nd „	—	—	—	1	—	—	—	—	—	1	2	—	2	3
3rd „	—	—	—	—	—	—	—	—	2	2	1	1	2	4
4th ,	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total for Year	—	—	—	1	—	—	—	—	3	4	4	1	5	9

## **Scarlet Fever.**

No cases were notified during the year.

## **Diphtheria.**

No cases were notified.

## **Immunisation Against Diphtheria.**

This question has been a matter of serious concern to Medical Officers of Health for a considerable period.

Early in the year, a meeting of Medical men held at Maidstone, was addressed on the subject by the Medical Officer of Health for Heston and Isleworth. In this district active immunisation of children against Diphtheria had been carried on for some time. The meeting was greatly impressed by the volume of evidence in favour of the procedure.

In April, a Conference of Medical Officers of Health in the County was convened by the County Medical Officer further to consider the matter. This Conference appointed a sub-committee to go thoroughly into the subject and report as to its findings. I was honoured by being made Chairman of this Committee.

A great volume of information on the subject from many countries was considered carefully by the Committee and the following conclusions were reported. I am giving these conclusions in a very brief form.

(a) There is now no doubt that active immunisation, properly carried out, is highly effective in protecting the individual against Diphtheria. In the few instances in which Diphtheria occurring in an immunised person has been reported, the infection has mostly been of the "gravis" type despite which the attack has never been severe.

The injection of the prophylactic recommended practically never produces any serious effects.

(b) To be really effective the procedure must be carried out generally throughout the County.

(c) With this in view, the Committee considers that the County Authority should take an active part in any general scheme, probably by bearing a share of the cost involved.

(d) That as the best results are shown to be from the immunisation of the younger children, the procedure should at first be confined to children under school leaving age, special attention being directed to endeavouring to ensure the immunisation of as many as possible of the age group 1 to 5 years in which the incidence is greatest.

(e) Propaganda work could usefully be done by well informed teachers at the schools and at meetings of the various Women's Institutes.

(f). Cost is rather difficult to evaluate, but a maximum cost for the County can be arrived at.

If the ideal 100 per cent. immunisation were attained, it would involve the treatment of some 20,000 children annually (this being the average number born annually in the County). This would entail an expenditure of roughly £6,000 per annum for the entire County. This 100 per cent., however, will almost certainly never be attained even approximately.

Against this must be considered the annual cost of actual Diphtheria cases in the County. During the past 10 years there has been an average of 1354 cases of Diphtheria per annum in the County. The minimum cost of these can be reckoned, conservatively, at £17,000 per annum. And, each year 71 deaths have occurred from the disease even with modern methods of treatment.

It would appear that there would be an annual economy of £11,000. This would not actually be the case for there would undoubtedly still be some cases of Diphtheria. Nevertheless, there would be a very considerable saving which would increase annually as immunisation became general.

### **Pneumonia.**

One case only was notified. One death was registered as resulting from the disease.

### **Enteric Fever.**

No cases occurred.

### **Puerperal Pyrexia.**

No cases occurred.

### **Tuberculosis.**

Five cases were notified. Two deaths occurred.

Cases of Tuberculosis Remaining on Register Sandwich M.B., December 31st, 1938.			
Male		Female	
Pulmonary	Non-Pulmonary	Pulmonary	Non-Pulmonary
4	2	7	—

1938 Table showing age periods, etc., of cases of Infectious Diseases notified															
Disease	Age Period												Total	Admitted to Hospital	Deaths
	0	1	2	3	4	5	10	15	20	35	45	65			
Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia	—	—	—	—	—	—	—	—	—	—	1	—	1	—	1
Enteric Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	—	—	—	—	—	—	—	1	1	—	—	1	3	—	—
Puerp. Pyrexia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

TUBERCULOSIS NOTIFICATIONS, ETC., 1938.													
Age Periods	New Cases Notified				Deaths								
					Notified Cases				Non-notified Cases				
	Pulmo-nary		Non-Pul-monary		Pulmo-nary		Non-Pul-monary		Pulmo-nary		Non-Pul-monary		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
0	—	—	—	—	—	—	—	—	—	—	—	—	
1	—	—	—	—	—	—	—	—	—	—	—	1	
5	—	—	—	—	—	—	—	—	—	—	—	—	
10	—	—	—	—	—	—	—	—	—	—	—	—	
15	—	—	1	—	—	—	—	—	—	—	—	—	
20	—	—	—	—	—	—	—	—	—	—	—	—	
25	1	2	—	—	—	—	—	—	—	—	—	—	
35	—	—	—	—	—	—	—	—	—	1	—	—	
45	—	1	—	—	—	—	—	—	—	—	—	—	
55	—	—	—	—	—	—	—	—	—	—	—	—	
65&over	—	—	—	—	—	—	—	—	—	—	—	—	
Total	1	3	1	—	—	—	—	—	—	1	—	1	

## **HOSPITALS.**

### **Infectious Diseases.**

Cases of infectious diseases are sent to the Dover Borough Isolation Hospital since the closure of the Eastry Isolation Hospital.

### **Small-pox.**

Fresh arrangements have been made in accordance with the scheme suggested by the County Authority. In future, cases of Small-pox which may arise in the Borough will be removed to the Dover Borough Small-pox Hospital situated at Poulton.

### **General.**

Cases requiring hospital treatment are largely dealt with at the Kent and Canterbury Hospital, situated at Canterbury.

Cases are also sent to the Victoria Hospital, Deal, which has 35 beds, mainly used for surgical cases. Both Hospitals have efficient x-ray apparatus. The Canterbury Hospital has also special Orthopædic, Dental and Ophthalmic Departments, and there is a trained masseuse on the staff. There appears to be no difficulty in obtaining hospital accommodation in time of need.

### **Maternity and Nursing Homes.**

There are none in the Borough.

### **Maternal Mortality, Etc.**

Cases are followed up and reported to the County Medical Officer.

### **Institutional Provision for Unmarried Mothers, Illegitimate Infants and Homeless Children.**

No special provision has been made.

### **Institutional Provision, if any, for the case of Mental Defectives.**

No special provision has been made.

### **Ambulance Facilities.**

(a) For infectious cases. Cases are removed by the Dover Borough Motor Ambulance.

(b) For non-infectious and accident cases. The Borough possesses an efficient motor ambulance.

## **CAMPING SITES.**

One site was in use and one site was licensed. The maximum number using the camp is unknown.

## **WATER SUPPLY.**

The water supply for the Borough as originally constituted is derived from the Corporation's Waterworks situated at Drainless Drove, Woodnesborough, in the Eastry Rural District. The supply is ample and the quality of the water is excellent as shown by the Bacteriological Reports which follow. I must again urge the advisability of installing a softening process. The cost would rapidly be repaid to the community by increased convenience and almost certainly better health. The added areas in the South derive their supply from the East Kent Water Company and in the North as regards the late Minster area from the Ramsgate Water Company.

# SAMPLES OF DRINKING WATER 1938.

Date of Taking Sample.	Source of Sample.	No. of Organisms per C.C. capable of growth on Agar at 37 Deg. C.      22 Deg. C.		B. Cpli, presumptive.	Remarks.
		37 Deg. C.	22 Deg. C.		
12th January ...	Guildhall ... ..	0	0	Absent in 100 C.C.	Good Water
10th February ...	Guildcount House ... ..	4	1	Absent in 100 C.C.	Good Water
10th March ...	Guildhall ... ..	1	528	Absent in 100 C.C.	22 Deg. Count too High
21st April ...	Guildhall ... ..	0	0	Absent in 100 C.C.	Good Water
12th May ...	Guildhall ... ..	0	7	Absent in 100 C.C.	Good Water.
9th June ...	Tap in yard in Church St., St. Mary ... ..	1	2	Absent in 100 C.C.	Good Water
14th July ...	Guildhall ... ..	1	2	Absent in 100 C.C.	Good Water
11th August ...	20, Fisher Street ... ..	1	14	Absent in 100 C.C.	Good Water
8th September ...	8, Poulders Avenue ... ..	2	24	Absent in 100 C.C.	Good Water
13th October ...	Guildhall ... ..	0	3	Absent in 100 C.C.	Good Water
10th November ...	Guildcount House ... ..	2	2	Absent in 100 C.C.	Good Water
8th December ...	Tap in yard at Messrs. Bishop and Sons ... ..	0	2	Absent in 100 C.C.	Good Water

(Signed) LOUIS L. GRIFFITHS,  
Pathologist.

## RIVERS AND STREAMS.

The Borough sewage is still being discharged untreated into the River Stour. I am, as usual, appending Reports received from the County Analyst in regard to quarterly samples of the river water submitted for examination during the year :—

County Analyst's Laboratory,  
Sessions House, Maidstone.

1st April, 1938.

Dear Sir,

I have examined the four samples of water taken from the River Stour at Low Water on the 22nd ult., and I have obtained the following results which are expressed in parts per 100,000 :—

	1	2	3	4
	No. 1 Sewer Outfall	Junct. of Guestling with Stour	Sandwich Bridge	White Bridge
Total dissolved solids ...	75.0	71.5	71.0	73.0
Total suspended solids ...	7.25	9.5	7.0	7.5
Organic        „        „ ...	1.0	1.0	1.0	1.5
Chlorine     ...     ..     ...	21.1	20.7	20.4	20.4
Free Ammonia     ...     ..	0.02	0.018	0.018	0.018
Albuminoid Ammonia ..	0.03	0.024	0.02	0.018
Oxygen absorbed (acid permanganate) $\frac{1}{4}$ hour	0.095	0.102	0.100	0.094
Oxygen absorbed (acid permanganate) 4 hours	0.175	0.197	0.168	0.180
Nitrogen as Nitrates     ...	0.4	0.4	0.3	0.3
Nitrogen as Nitrites     ...	Absent	Absent	Absent	Absent
Dissolved Oxygen requirement in 5 days	0.219	0.297	0.204	0.273

The composition of all the four waters is very similar.

Yours faithfully,  
(Signed) F. W. F. ARNAUD,  
County Analyst.

County Analyst's Laboratory,  
Sessions House, Maidstone.

29th June, 1938.

Dear Sir,

I have examined the four waters taken from the River Stour at High Water on the 22nd inst., and I have obtained the following results which are expressed in parts per 100,000 :—

	1	2	3	4
	Opposite Gosshall Sluice	Opposite No. 1 Sewer Outfall	At Sandwich Bridge	At White Bridge
Total dissolved solids ...	87.0	96.0	100.0	113.5
Total suspended solids ...	10.5	10.5	10.0	10.0
Organic    „    „ ...	3.0	3.5	3.0	3.75
Chlorine    ...    ...    ...	28.3	32.1	36.0	37.5
Free ammonia    ...    ...	0.004	0.008	0.008	0.014
Albuminoid ammonia ...	0.088	0.088	0.092	0.092
Oxygen absorbed (acid permanganate $\frac{1}{4}$ hour) ...	0.213	0.163	0.220	0.234
Oxygen absorbed (acid permanganate 4 hours)...	0.383	0.355	0.396	0.383
Nitrogen as nitrates    ...	0.1	0.1	0.1	0.1
Nitrogen as nitrites    ...	Very faint trace	Very faint trace	Very faint trace	Very faint trace

The four waters are of very similar composition. The river at White Bridge would appear to contain somewhat more salt water than at Gosshall Sluice.

Yours faithfully,  
(Signed) F. W. F. ARNAUD,  
County Analyst.

County Analyst's Laboratory,  
Sessions House, Maidstone.

20th September, 1938.

Dear Sir,

I have examined three samples of water taken from the River Stour at Low Water and received from you on the 12th inst., and I have obtained the following results which are expressed in parts per 100,000 :—

	1	2	3
	No. 1 Sewer Outfall	Guestling Estuary	Sandwich Bridge
Total dissolved solids ...	126.5	126.0	129.0
Total suspended solids ...	18.9	20.7	18.0
Organic    „    „    ..	1.9	1.9	2.1
Chlorine    ...    ...    ...	45.1	45.1	44.4
Free Ammonia    ...    ...	0.008	0.012	0.012
Albuminoid Ammonia ...	0.080	0.068	0.056
Oxygen absorbed (acid permanganate) $\frac{1}{4}$ hour	0.104	0.083	0.083
Oxygen absorbed (acid permanganate) 4 hours	0.166	0.145	0.145
Nitrogen as Nitrates    ...	0.2	0.2	0.2
Nitrogen as Nitrites    ...	Trace	Trace	Trace
Dissolved Oxygen requirement in 5 days	0.42	0.38	0.25

The composition of these three waters is very similar.

Yours faithfully,  
(Signed) F. W. F. ARNAUD,  
County Analyst.

County Analyst's Laboratory,  
Sessions House,  
Maidstone.

15th December, 1938.

Dear Sir,

I have examined the four samples of water taken from the River Stour at Low Water and received by me on the 6th inst. I have obtained the following results which are expressed in parts per 100,000 :---

	1 Nr. Gosshall Sluice.	2 Mid-stream Nr. Guest- ling Estuary	3 Sandwich Bridge.	4 White Bridge
Total dissolved solids ...	105.0	106.5	105.0	107.0
Total suspended solids ...	11.0	43.0	29.0	19.0
Organic       "       " ...	2.5	6.0	6.5	4.5
Chlorine       ...       ...	34.9	35.0	33.0	34.4
Free Ammonia       ...	0.060	0.060	0.048	0.044
Albuminoid Ammonia ...	0.044	0.048	0.044	0.032
Oxygen absd. (acid per- manganate) $\frac{1}{4}$ hour ...	0.184	0.248	0.224	0.216
Oxygen absd. (acid per- manganate) 4 hours ...	0.464	0.480	0.480	0.440
Nitrogen as nitrates       ...	0.2	0.1	0.1	0.1
Nitrogen as nitrites       ...	Faint trace	Absent	Absent	Very faint trace
Dissolved Oxygen Requirement in 5 days	0.270	0.225	0.114	0.192

The composition of all the four waters is similar.

Yours faithfully,  
(Signed) F. W. F. ARNAUD,  
County Analyst.

## **DRAINAGE AND SEWERAGE.**

The Drainage system continues to work satisfactorily. No complaints were received during the year.

### **Scavenging.**

The collection of domestic refuse is carried out very efficiently by the Corporation.

The old "dump" in the Sandown Road has now been closed down and the refuse is being dealt with by "controlled tipping" in a satisfactory manner. During the summer months a site on the Ash Road is used, and during the winter months a site on the Richborough Road.

## **SANITARY ADMINISTRATION.**

The following is a summary of the work of the Sanitary Department, and action taken under the Public Health Acts or Byelaws during the year:—

### **Adoptive Acts in Force.**

Public Health Acts (Amendment) Act, 1890.

Section 50, Public Health Act, 1907, Motor Ambulance.

### **Public Health Staff.**

This consists of the Medical Officer of Health and one whole-time Sanitary Inspector.

### **M.O.H.**

J. J. Day, O.B.E., M.R.C.S., L.R.C.P., D.P.H.,  
Castlemead, Manwood Road, Sandwich.

### **Sanitary Inspector.**

H. Kendall, A.R.San.I., Municipal Offices, Sandwich.

### **Sandwich M.B., 1938.**

Number of Inspectors of Nuisances, 1 whole-time, nil part-time.

Total number of visits paid by Inspector during the year, 1,321.

Places Inspected	No. in District.	No. of Visits in 1938	No. of Faults & Defects Found	No. of Faults & Defects Remed'd
Bakehouses ... ..	5	12	—	—
Dairies... ..	7	20	—	—
Slaughter Houses { Registered	2	260	1	1
{ Licensed	2	132	1	1
Other food preparing places, which are, as such, subject to inspection	6	11	—	—
Offensive Trades ..	—	—	—	—
Common Lodging Houses	1	2	—	—
Houses let in Lodgings ...	2	1	—	—
Factories ... ..	19	21	4	4
Workshops ... ..	25	21	5	5
Workplaces .. ..	7	6	—	—
(Other than Outworkers' Homes) ... ..	51	48	—	—

Nuisances and defects remedied during the year (other than those enumerated in the above tabulation):

Overcrowding ... .. 3

Keeping of animals ... .. 1

Hop-pickers' camps ... .. —

Sanitary accommodation:

(a) Insufficient ... .. —

(b) Defective ... .. 10

Drainage:

(a) Re-constructed ... .. 1

(b) Repaired ... .. 1

(c) Cleansed ... .. 48

# Cesspools :

(a) Abolished	...	...	...	9
(b) Repaired	...	...	...	—
Offensive accumulations	...	...	...	1
Refuse receptacles	...	...	...	50
Tents, vans and sheds	...	...	...	—
Smoke nuisances	...	...	...	—
Yard paving	...	...	...	—
Dampness	...	...	...	4
Roofs and rain water pipes	...	...	...	20
Floors	...	...	...	6
Walls and ceilings	...	...	...	5
Windows and ventilation	...	...	...	5
Baths, Lavatory Basins and Sinks				3
Water supplies	...	...	...	5
Miscellaneous	...	...	...	14

## Number of premises containing each type of sanitary conveniences in district (approximate)

### W.C.'s.—

(a) into Drainage system	...	1200
(b) into Cesspools	... ..	22
Earth Closets or Privy Middens	... ..	Nil
Pail Closets	... ..	11

Notices served (a) Statutory, 7, (b) informal, 143.

Number of premises, etc., disinfected, 8.

Number of batches of clothing, etc., disinfected, 3.

The **Bakehouses** (5) and **Dairies** (7) in the Borough were visited during the year, no defects were found.

Samples of milk are taken at the request of the County Authorities and submitted for Bacteriological examination and report.

## Slaughter Houses.

The two registered and two licensed slaughter houses were visited 392 times during the year and found to be well conducted and in good condition. The tabular statement appended shows all particulars in regard to carcasses inspected and condemned :—

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed .. ...	57	4	73	392	575
Number inspected ... ..	57	4	73	392	575
<b>All diseases except Tuberculosis</b>					
Whole carcase condemned	0	0	0	0	0
Carcases of which some part or organ was condemned	11	0	0	3	4
Percentage of the number inspected affected with disease other than tuber- culosis ... ..	19.3	0	0	0.76	0.7
<b>Tuberculosis only</b>					
Whole carcasses condemned	0	0	0	0	0
Carcases of which some part or organ was condemned	8	0	0	0	8
Percentage of the number inspected affected with tuberculosis ... ..	14	0	0	0	1.39

Meat condemned during 1938 : 3 cwts. 0 qtrs. 24 lbs.

## Sale of Food and Drugs Act.

Action is taken by the Police.

The **Factories, Workshops and Work-places** were regularly inspected and found to be in satisfactory sanitary condition and well conducted. Minor defects found were remedied.

## Disinfection of Infected Articles.

This is carried out by the Sanitary Inspector. The Council does not possess a steam disinfecter.

## Schools.

The sanitary condition and water supply of the Elementary Schools is satisfactory.

## SANITARY INSPECTOR.

The summary of the Sanitary Inspector's work for the year shows, as usual, evidence of the thoroughness with which he performs his duties. He has been of great assistance to me during the year and his co-operation is unfailing. I am glad to take this opportunity to express my gratitude and indebtedness to him.

### PORT AND HAVEN OF SANDWICH.

#### Annual Report of the Medical Officer of Health for the Year 1938.

To the Conservators of the Port and Haven of Sandwich.  
Gentlemen,

I have to report as follows for the year 1938 :—

#### A.—Amount of shipping entering the Port during the year 1938.

			Number	Tonnage	Number Inspected		Number reported to be defective	Number of Vessels on which defects were remedied	Number of Vessels reported as having, or having had during the voyage, infectious disease on board
					By the Medical Officer	By the Sanitary Inspector			
Foreign	Steamers	...	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	Motor	...	6	645	1	3	Nil	Nil	Nil
	Sailing	...	Nil	—	—	—	—	—	—
	Fishing	...	Nil	—	—	—	—	—	—
	Total Foreign	...	6	645	1	3	—	—	—
Coastwise	Steamers	...	26	3652	Nil	Nil	Nil	Nil	Nil
	Motor	...	143	13722	1	3	Nil	Nil	Nil
	Sailing	...	8	460	Nil	2	Nil	Nil	Nil
	Fishing	...	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	Total Coastwise		177	17834	1	5	—	—	—
Total Foreign and Coastwise			183	18479	2	8	Nil	Nil	Nil

## **B.—Character of Trade of Port.**

Passenger traffic, nil.

Cargo traffic.—Principal imports: Petroleum products, cement, grain, timber, sugar, stone. Exports: Coal.

Foreign ports from which vessels arrive.—Finland: Trang sund, Haminia. Lithuania: Memel. Sweden: Gefle.

## **Source of Water Supply.**

(a) For the Port, Sandwich Town supply (Deep Well).

(b) For shipping, Town supply.

(c) Number of water boats, Nil.

## **Infectious Disease.**

(1) Arrangements for detection of infectious disease on inward vessels.—It is arranged by the Customs Officials and/or Harbour Master to notify the existence of any cases of sickness on vessels to the Port Medical Officer, who will then inspect such.

(2) Arrangements for the notification to the P.S.A. of the arrival of inward vessels requiring special attention.—Notification is given by the Customs Officials and/or the Harbour Master.

(3) What vessels are boarded on arrival, by whom, where and how.—Vessels from foreign ports at which there is known to be infectious disease: all strange coastwise vessels: vessels making repeat calls are also boarded at intervals.

By Port Medical Officer and/or Sanitary Inspector.  
At Dockside.

(4) Arrangements for disposal of cases of infectious disease and for observation of surveillance of contacts.—Infectious cases would be removed to the Dover Borough Isolation Hospital. The vessel would remain at mooring station at the discretion of the Port Medical Officer.

(5) Arrangements for disinfection of infected quarters, bedding, clothing, etc.—Quarters are disinfected by the Sanitary Inspector, and bedding, clothing, etc., are disinfected at the Dover Borough Isolation Hospital.

(6) Arrangements for the cleansing of persons.—When necessary, such cleansing would be carried out at the Eastry Institution.

(7) Arrangements for ambulance transport.—Infectious cases would be removed in the ambulance belonging to the Dover Borough Isolation Hospital. The Borough Council possess an ambulance for non-infectious cases.

(8) Arrangements for detection and treatment of Venereal Disease amongst sailors.—No special arrangements made. Notices in regard to treatment centres are posted in public conveniences.

(9) Arrangements for bacteriological examinations of rats.—All bacteriological examinations are made by the County Medical Officer of Health at Maidstone.

(10) Arrangements for other bacteriological examinations.—As para. 9 above.

**Table C.**

Cases of Infectious Sickness landed from Vessels.

Disease	No. of Cases during 1938		No. of Vessels	Average No. for previous 5 years
	Passengers	Crew		
Nil	Nil	Nil	Nil	Nil

**Table D.**

Cases of Infectious Sickness occurring on vessels, but disposed of prior to arrival:—

1938	...	...	...	...	...	Nil
Previous 5 years	...	...	...	...	...	Nil

### Measures Against Rodents.

Steps taken for detection of rodent plague: (a) In ships in the Port.—Inspections by P.S.A. before and after unloading of vessels. (b) On quays, wharves, warehouses, etc., in the vicinity of the Port.—Routine inspections are made by the Borough Sanitary Inspector.

(2) Measures taken to prevent the passage of rats between ships and the shore.—Cones attached to mooring cables.

(3) Methods of de-ratisation: (a) Ships.—By poison. (b) Premises in the vicinity of docks or quays.—By traps, poison and cats.

(4) Measures taken for the detection of rat prevalence in ships and on shore.—Visits of inspection made by Sanitary Inspector to ships and warehouses to search for evidence of rats.

(5) Rat proofing.—(a) To what extent are docks, wharves, warehouses, etc., rat proof?—Principal quays are of stone and concrete construction, and afford little or no harbourage for rats. Warehouses are of brick or corrugated iron on concrete floors. Upper floors have open joists.

Action taken to extend rat proofing.—(1) In ships: Nil. (2) On shore: Nil.

### **Rats destroyed during 1938.**

**Table E.**

(1) On vessels ... .. Nil  
 (2) In docks, wharves and ware-  
       houses ... .. 160 approx.

**Table G.**

Particulars relating to plague “infected” or “suspected” vessels arriving in the Port during 1938, Nil.

**Table H.**

Measures for rat destruction on vessels from plague infected Ports arriving in the Port during 1938, and number of certificates issued in respect of such vessels, Nil.

**Table I.**

Measures for rat destruction on vessels (other than those included in Tables G and H), and number of certificates issued in respect of such vessels during 1938, Nil.

### **Hygiene of Crew's Spaces.**

**Table J.**

#### **Classification of Nuisances.**

Nationality of Vessel	Number inspected during 1938	Defects of original construction	Structural defects through wear and tear	Dirt, vermin and other conditions prejudicial to health
British	3	Nil	Nil	Nil
Other Nations	6	Nil	Nil	Nil

### **Food Inspection.**

(1) Action taken under the Public Health (Imported Food) Regulations, 1925, the Public Health (Imported Milk) Regulations, 1926, and the Public Health (Preservatives in Food) Regulations, 1925 to 1927, Nil. No articles of food arrive from foreign ports, and sugar only by coastwise traffic from London.

(2) Shell Fish.—Information respecting any shell fish beds or layings within the jurisdiction of the P.S.A., Nil. There are no shell fish beds in the vicinity of this Port.

(3) Number of samples of food examined by.—(a) Bacteriologist: No samples taken. (b) Analyst: No samples taken.

I am, Gentlemen,

Your obedient Servant,

J. J. DAY,

Medical Officer of Health and  
Port Medical Officer.



